

FIG.1A

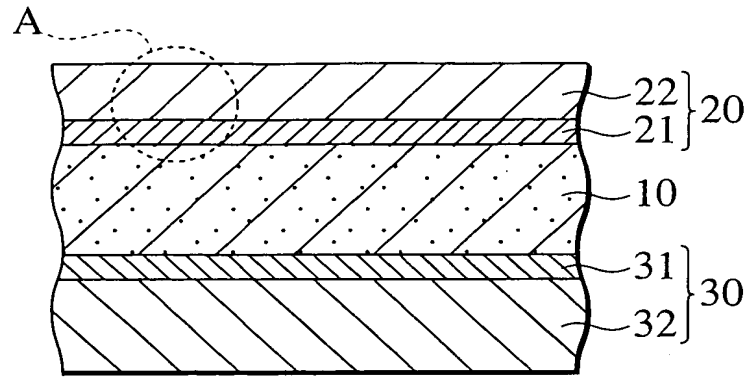


FIG.1B

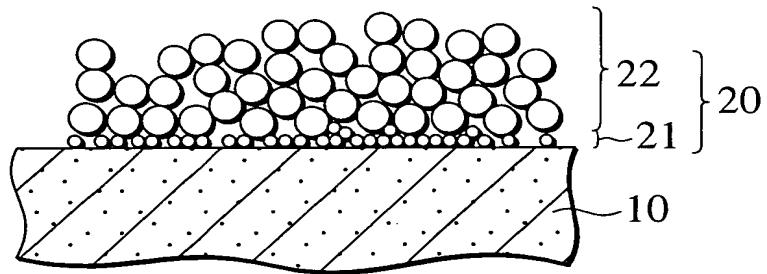


FIG.2

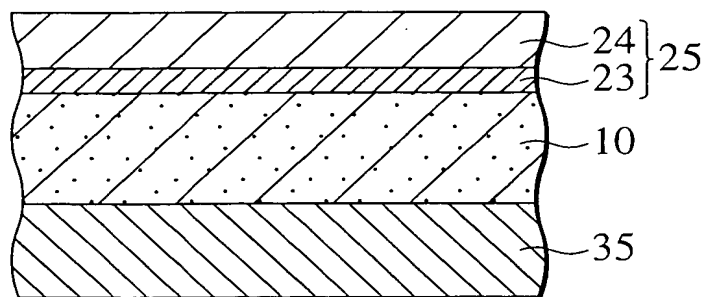


FIG.3A

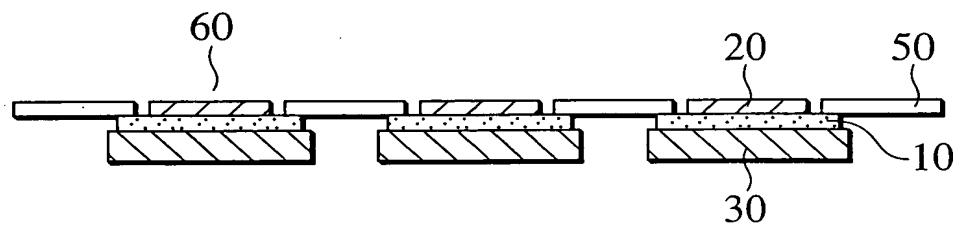


FIG.3B

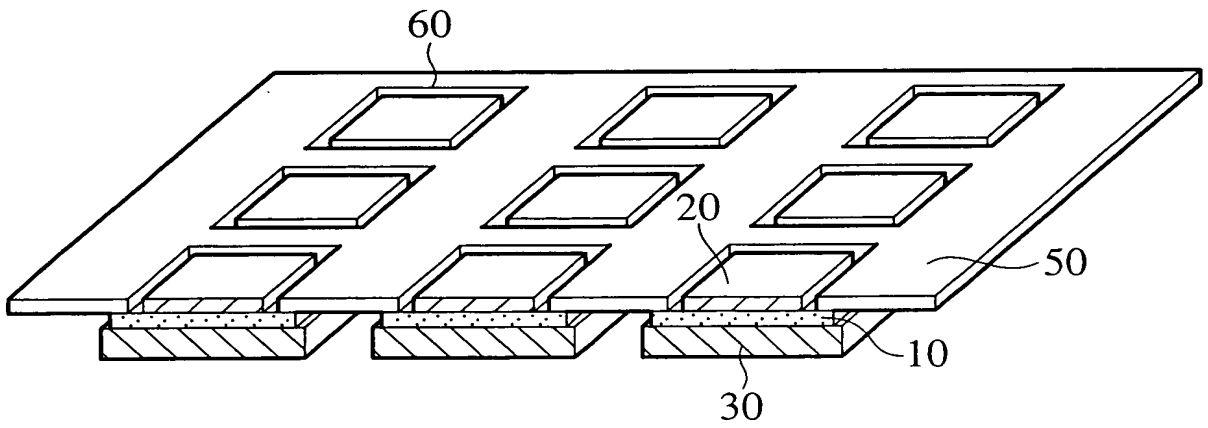


FIG.4A

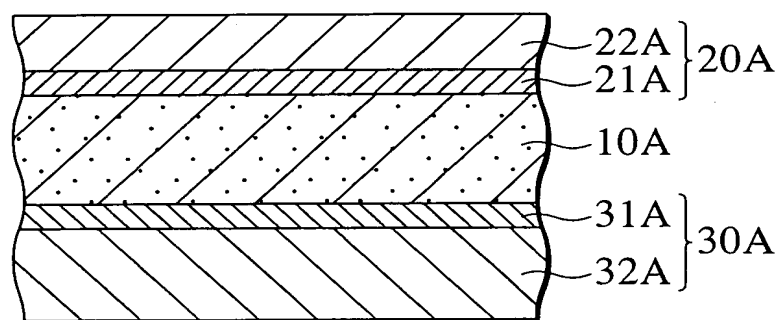


FIG.4B

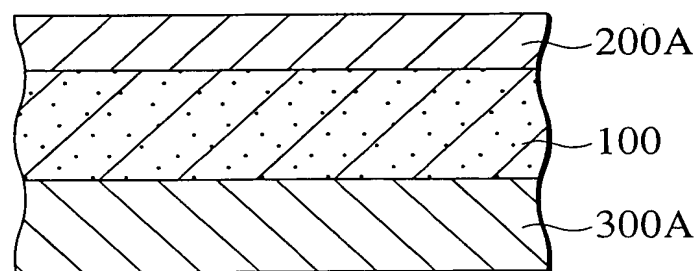


FIG.4C

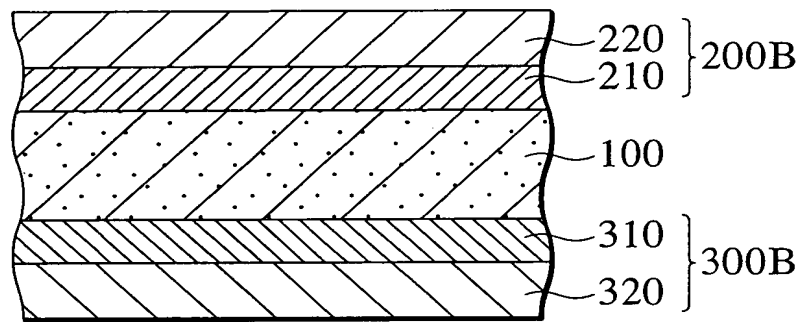


FIG.4D

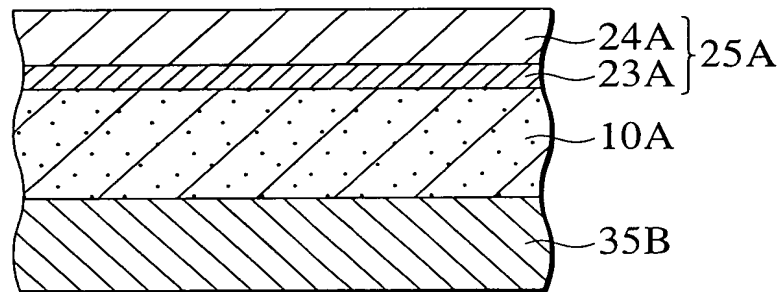


FIG.5

Table. 1

| | Air electrode (Ag) | | Fuel electrode (Ni) | | Peeling property | Cell property (i=0.4A/cm ² hour) |
|-----------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|------------------|---|
| | Lower layer | Upper layer | Lower layer | Upper layer | | |
| Example 1 | Sputtering film : 50 nm | Splayed film : 15 μ m | Sputtering film : 50 nm | Splayed film : 35 μ m | OK | 0.130W/cm ² |
| Comparative example 1 | — | Splayed film : 15 μ m | — | Splayed film : 35 μ m | OK | 0.12W/cm ² |
| Example 2 | Splayed film : 0.1 μ m | Splayed film : 15 μ m | Splayed film : 0.1 μ m | Splayed film : 35 μ m | OK | 0.127W/cm ² |
| Comparative example 2 | — | Splayed film : 15 μ m | — | Splayed film : 35 μ m | × | 0.123W/cm ² |
| Comparative example 3 | Sputtering film : 2 μ m | Splayed film : 15 μ m | Sputtering film : 2 μ m | Splayed film : 35 μ m | × | 0.11W/cm ² |

*) The lower layer and the upper layer in the air electrode are an adhering cathode layer and an electricity collecting cathode layer respectively.

*) The lower layer and the upper layer in the fuel electrode are an adhering anode layer and an electricity collecting anode layer respectively.

FIG.6

Tabl. 2

| Example No | Electrical collecting cathode layer | | Adhering cathode layer | | | | Cell resistance (Ω) |
|-----------------------|-------------------------------------|-------------------|---------------------------|-----------------|---|-------------------|------------------------------|
| | Material | Particle diameter | Material | Method | Baking temperature ($^{\circ}\text{C}$) | Adhesion strength | Resistance (Ω) |
| Example 3 | LSC | 5 μm | Ag | Sputtering | 800 | ○ | 0.05 |
| Example 4 | LSC | 5 μm | Bismuth oxide | EB deposition | 800 | ○ | 0.11 |
| Example 5 | LSC | 5 μm | Ag+LSC | Sputtering | 850 | ○ | 0.07 |
| Example 6 | LSC | 5 μm | Bismuth oxide+ glass frit | Screen printing | 900 | ○ | 0.15 |
| Comparative example 4 | LSC | 5 μm | Nothing | — | 1100 | ○ | — |
| Comparative example 5 | LSC | 5 μm | Nothing | — | 800 | × | — |
| Comparative example 6 | LSC | 5 μm | Ag | Sputtering | 850 | ○ | 0.21 |
| Comparative example 7 | LSC | 5 μm | Bismuth oxide+ glass frit | Screen printing | 500 | × | 0.18 |